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Range: from  to  ☐ Reverse complemented strand Features: ☐ SNP ☐ CDD ☒

☐ 1: [NM\\_153618](#). Reports Homo sapiens sema...[gi:24234740]

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LOCUS NM\_153618 6109 bp mRNA linear PRI 17-OCT-2005  
 DEFINITION Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D (SEMA6D), transcript variant 4, mRNA.

ACCESSION NM\_153618  
 VERSION NM\_153618.1 GI:24234740

KEYWORDS

SOURCE Homo sapiens (human)

ORGANISM [Homo sapiens](#)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 6109)

AUTHORS Toyofuku,T., Zhang,H., Kumanogoh,A., Takegahara,N., Suto,F., Kamei,J., Aoki,K., Yabuki,M., Hori,M., Fujisawa,H. and Kikutani,H.

TITLE Dual roles of Sema6D in cardiac morphogenesis through region-specific association of its receptor, Plexin-A1, with off-track and vascular endothelial growth factor receptor type 2

JOURNAL Genes Dev. 18 (4), 435-447 (2004)

PUBMED [14977921](#)

REFERENCE 2 (bases 1 to 6109)

AUTHORS Qu,X., Wei,H., Zhai,Y., Que,H., Chen,Q., Tang,F., Wu,Y., Xing,G., Zhu,Y., Liu,S., Fan,M. and He,F.

TITLE Identification, characterization, and functional study of the two novel human members of the semaphorin gene family

JOURNAL J. Biol. Chem. 277 (38), 35574-35585 (2002)

PUBMED [12110693](#)

REMARK GeneRIF: identification, characterization, and functional study of the two novel human members of the semaphorin gene family

REFERENCE 3 (bases 1 to 6109)

AUTHORS He,Z., Wang,K.C., Koprivica,V., Ming,G. and Song,H.J.

TITLE Knowing how to navigate: mechanisms of semaphorin signaling in the nervous system

JOURNAL (er) Sci. STKE 2002 (119), RE1 (2002)

PUBMED [11842242](#)

REMARK Review article

COMMENT REVIEWED REFSEQ: This record has been curated by NCBI staff. The reference sequence was derived from [AF389429.1](#).

Summary: Semaphorins are a large family, including both secreted and membrane associated proteins, many of which have been implicated as inhibitors or chemorepellents in axon pathfinding, fasciculation and branching, and target selection. All semaphorins

possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Additional sequence motifs C-terminal to the semaphorin domain allow classification into distinct subfamilies. Results demonstrate that transmembrane semaphorins, like the secreted ones, can act as repulsive axon guidance cues. This gene encodes a class 6 vertebrate transmembrane semaphorin that demonstrates alternative splicing. Six transcript variants have been identified and expression of the distinct encoded isoforms is thought to be regulated in a tissue- and development-dependent manner.

Transcript Variant: This variant (4) is the longest transcript and encodes the longest isoform (4).

COMPLETENESS: complete on the 3' end.

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Oct 4 2005 13:52:42